Wärtsilä is a global leader in complete lifecycle power solutions for the marine and energy markets. By emphasising technological innovation and total efficiency, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers. In 2012, Wärtsilä’s net sales totalled EUR 4.7 billion with approximately 18,900 employees. The company has operations in nearly 170 locations in 70 countries around the world. Wärtsilä is listed on the NASDAQ OMX Helsinki, Finland.
Smart Power Generation enables the global transition to a sustainable, reliable and affordable energy infrastructure.

It is a new, unique solution for flexible power generation and an essential part of tomorrow’s optimized and secure low carbon power systems.

Smart Power Generation can operate in multiple modes, from efficient base load power production to ultra fast dynamic system balancing.

Smart Power Generation improves the system total efficiency, and solves the variability challenges of maximized wind integration.

AGILITY OF DISPATCH
- Megawatts to grid in 30 sec from start
- 2 minutes to full load from start
- Fast shut down in 1 minute
- Fast ramp rates up & down
- Unrestricted up/down times
- High starting reliability
- Remote operator access including start & stop
- Black start capability

LOW GENERATION COSTS
- High efficiency (>49% in simple cycle and >53% in combined cycle)
- High dispatch with low CO₂
- Wide economic load range
- Multiple units
- Any plant output with high efficiency
- No derating enabling higher dispatch in hot climate and at high altitude
- Low maintenance costs, not influenced of frequent starts and stops, and cyclic operation
- Low/no water consumption

HIGH PLANT RELIABILITY AND AVAILABILITY
- Multiple units enable firm power
- Typical plant availability >97%
- Typical plant reliability >99%
- Typical unit starting reliability >99%

OPTIMUM PLANT LOCATION AND SIZE
- Location inside load pockets i.e. cities
- Flexible, expandable plant size enables step by step investments
- Typical size range 50–600 MW
- Low pipeline gas pressure requirement (5 bar)

FUEL FLEXIBILITY
- Natural gas and biogases with back-up fuel
- Liquid fuels (LBF, LFO, HFO)
- Fuel conversions

LOW ENVIRONMENTAL IMPACT
- Low CO₂ and local emissions even when ramping and on part load

EASY MAINTENANCE
- Smart Power Generation can operate in multiple modes, from efficient base load power production to ultra fast dynamic system balancing.
- Smart Power Generation improves the system total efficiency, and solves the variability challenges of maximized wind integration.

Read more at www.smartpowergeneration.com